

ABSTRACT OF THE DISCLOSURE

Disclosed is a

0420 344600

SECURED ACCESS DEVICE WITH CHIP CARD APPLICATIONS

Abstract of the Disclosure

A device for secured access to applications
of a chip card, ~~bringing into operation~~ executes
instructions that provide information, ~~at each point in~~
5 ~~time, on the rights, especially in terms of access to~~
~~the chip card, of~~ on the rights for accessing the chip
card with respect to a software component or a hardware
action performed in the chip card. ~~In the case of~~ For
each new software component and at each new hardware
10 action, a register R of the microprocessor of the chip
card stores a specific code ~~that makes it possible to~~
~~check~~ for checking the authorized nature of the
~~operations of access to the memory of the chip card~~
~~that are~~ performed by the new software component or
15 hardware action.

Figure 2

for accessing the memory of the chip card.

SECURED ACCESS DEVICE WITH CHIP CARD APPLICATIONS
BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a secured access device with chip
5 card applications.

More specifically, the invention relates to a device for secured
access to chip card applications that uses especially instructions which, at
each instant, provide information on rights, especially in terms of access
to the memory of the chip card, the software component or the hardware
10 operation that has been performed in the chip card.

2. Description of the Prior Art

The most common type of chip card has a microprocessor that
manages a program memory. The program memory is usually dedicated
to a single application or a set of applications loaded at the same time into
the chip card. When several applications are loaded into a chip card, they
15 have a close relationship with one another and are all designed for one
and the same type of service. Thus, for example, a chip card cannot
simultaneously play the role of a bank card and that of a customer loyalty
card for a business of any kind.

In order to end this situation where each chip card has to be limited
20 to one type of application, new software architectures are being
considered. These new software architectures are making use of the
development of standardized programming languages (for example the
language "JAVA") which resolve the problems of portability.

Figure 1 is a simplified view of a software architecture of the chip
25 card projects that are now being developed. The architecture shown in
Figure 1 comprises, in particular, a first part 110 that corresponds to what
is called the software architecture of a chip card 100 and a second part
120 that corresponds to what is called the applications part of the software
30 architecture of the chip card 100. The system part 110 of the chip card is
essentially formed by a library of programs 112 of the chip card operating
system, an interface 114 to manage the interactions with, for example, the
microprocessor of the chip card or else the different memories of the chip
card and a space for the management of hardware interruptions 116.

35 The applications part 120 of the software architecture consists of
different applications:

- a first, second and third main application, respectively 122, 124
and 126;